ABSTRACT OF THE DISCLOSURE

A microwave delivery system for a cooking appliance having a cooking chamber includes a toroidal-shaped waveguide, a magnetron, a tubular feed member interconnecting the magnetron with the toroidal-shaped wave guide and a field flux generator positioned about the tubular feed member. The flux field generator shifts a microwave energy field produced by the magnetron in the tubular feed member. The shifted microwave field focuses high energy standing waves that are directed into the toroidal-shaped wave guide and, ultimately, the cooking chamber. The field flux generator produces either magnetic or electrical fields and is driven by a pulsed DC current, a rectified AC current or a pure AC signal energy source.